

REMARKS

This paper is submitted in response to the final Office action mailed on August 28, 2008 and to place the application in better form for appeal. Specifically, the specification of the present application is amended herein to address the objection to the specification and the rejection of claims 15, 17-20 and 22-28 under 35 U.S.C. § 101. Further, the remarks originally presented in the Office action response filed on June 2, 2008 for the rejections of the claims under 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a) are included and summarized herein. After entry of this Amendment and Response, claims 1, 3-6, 8-15, 17-20, 22-29, 31-34 and 36-43 remain pending.

I. Specification

The specification is objected to for disclosing that a machine readable medium comprises "propagated signals," "carrier waves," "infrared signals" and "digital signals." In response, paragraph [0043] of the present application is amended to remove the inclusion of transmission signals as a machine readable medium. It is respectfully submitted that the specification is now proper in form. It is respectfully requested that the Examiner remove the objection to the specification in light of this amendment.

II. Claim Rejections Under 35 U.S.C. § 101

Claims 15, 17-20 and 22-28 are rejected under 35 U.S.C. § 101 because the claims are directed toward "a machine readable medium" which encompass subject matter that may include network transmission lines or carrier wave signals. As described above, the specification is amended herein to remove the inclusion of transmission signals as a machine readable medium. As such, it is respectfully submitted that claims 15, 17-20 and 22-28 are now in compliance with 35 U.S.C. § 101 and such indication is respectfully requested.

III. Claim Rejections Under 35 U.S.C. § 102

Claims 1, 6, 11, 15, 20, 25, 29, 34, 39 and 43 are rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,691,245 to DeKoning (hereinafter "DeKoning"). Under 35 U.S.C. § 102 "[a] claim is anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." See MPEP § 2131. For the following reasons recited below, it is respectfully submitted that DeKoning does not anticipate any of the above listed claims. Initially, the rejection of independent claims 1, 15, 29 and 43 are addressed.

A. Independent claims 1, 15, 29 and 43 are patentable because DeKoning fails to disclose the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation.

Independent claim 1 requires that the “the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation.” Independent claims 15, 29 and 43 include a similar limitation. It is respectfully submitted that DeKoning fails to teach these limitations as required by amended claims 1, 15, 29 and 43.

DeKoning describes a data storage system that provides a mirrored, fail-over storage on a remote storage device. However, the data storage system described by DeKoning requires that the applications accessing the data storage system do not have access to the data during the data preservation. As shown in Figure 6 of DeKoning, at the beginning of the data mirroring procedure, “the local host device quiesces, or suspends, any applications running on the local host device.” *See DeKoning, col. 10 lines 4-7.* Further, after the data mirroring is complete, “the business continuance client sends a signal to the client devices instructing them to restart their affected applications.” *See DeKoning, col. 9 lines 56-62.* In other words, DeKoning suspends all of the applications accessing the database prior to the data mirroring and restarts the applications after completion of the data mirroring. Therefore, DeKoning does not disclose read/write access to the data storage system remaining available by the at least one application during the data preservation as required by the amended independent claims. Further, the Examiner has already acknowledged that “DeKoning teaches a checkpoint procedure wherein applications are put into a quiescent state.” *See Office Action dated 08/03/2007, section 22(a).* Therefore, applications that are accessing the data storage system of DeKoning are halted until the data mirroring is complete. As such, DeKoning fails to anticipate the limitation of “the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation” as required by independent claims 1, 15, 29 and 43.

Further, the Office action asserts that the checkpoint procedure of DeKoning may be considered an application. *See Office action, page 11.* However, it is respectfully submitted that the checkpoint procedure of DeKoning is not an application that has read/write accessibility to the data storage system as required by the independent claims. Instead, the checkpoint procedure is initiated by the local host device which is a component of the data storage system. *See DeKoning, col. 10, lines 3-5 and Figure 1.* As described by DeKoning, the mirrored storage system 102 stores data and software application programs for use by various client devices 104.” *See DeKoning, col. 5, lines 11-12 and Figure 1 (Emphasis*

Added). In other words, the local host device, as described in DeKoning, is a component of the mirrored storage system. See *DeKoning, Figure 1*. Thus, an application initiated by the local host device would not have read/write access to the mirrored storage system, as the local host device is a component of the storage system. Instead, only client devices of DeKoning would have read/write access to the mirrored storage system. Therefore, the checkpoint procedure of the local host cannot be considered an application that has read/write access to the data storage system as required by the independent claims.

B. Dependent claims 6, 11, 20, 25, 34 and 39 are patentable because they depend upon and contain all of the limitations of independent claims 1, 15 and 29.

Dependent claims 6, 11, 20, 25, 34 and 39 are rejected as being anticipated by DeKoning. However, these claims all depend directly from independent claims 1, 15 and 29. As demonstrated above, DeKoning fails to disclose the data storage system being read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation as required by the amended independent claims. Therefore, for at least this reason, DeKoning does not anticipate all each and every limitation of dependent claims 6, 11, 20, 25, 34 and 39.

C. Conclusion

For at least the reasons set forth in both section A and B above, DeKoning fails to disclose all of the limitations of claims 1, 6, 11, 15, 20, 25, 29, 34, 39 and 43. Accordingly, it is respectfully submitted that these claims are allowable over the cited art. The Applicant thus respectfully requests that the Examiner withdraw the rejections and allow these claims over the cited reference.

IV. Claim Rejections Under 35 U.S.C. § 103

Claims 3, 8, 12, 17, 22, 26, 31, 36 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in view of United States Patent No. 6,493,796 to Arnon et al. (hereinafter "Arnon"). Claims 4, 9, 18, 23, 32 and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in view of United States Patent No. 7,149,787 to Mutalik et al. (hereinafter "Mutalik"). Claims 13, 27 and 41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in view of Arnon, in further view of Mutalik. Claims 5, 10, 14, 19, 24, 28, 33, 38 and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DeKoning in view of Mutalik in further view of Official Notice. A proper prima facie obviousness rejection requires that the combined references teach or suggest all of the claim limitations.

A. Dependent claims 3-5, 8-10, 12-14, 17-19, 22-24, 26-28, 31-33, 36-38 and 40-42 are patentable because they depend upon and contain all of the limitations of independent claims 1, 15 and 29.

Dependent claims 3-5, 8-10, 12-14, 17-19, 22-24, 26-28, 31-33, 36-38 and 40-42 are rejected as being unpatentable over a combination of DeKoning, Arnon, Mutalik and Official Notice. However, these claims all depend, either directly or indirectly, from independent claims 1, 15 and 29. As demonstrated above, DeKoning fails to disclose the limitation of "the data storage system is read/write accessible by at least one application and read/write access to the data storage system remains available by the at least one application during the data preservation." For at least this reason, dependent claims 3-5, 8-10, 12-14, 17-19, 22-24, 26-28, 31-33, 36-38 and 40-42 are patentable over DeKoning in combination with Arnon and Mutalik. The Applicant thus respectfully requests that the Examiner withdraw the rejections and allow these claims over the cited references.

V. Conclusion

The Applicant thanks the Examiner for his thorough review of the application. The Applicant respectfully submits the present application, as amended, is in condition for allowance and respectfully requests the issuance of a Notice of Allowability as soon as practicable.

The Applicant believes no fees or petitions are due with this filing. However, should any such fees or petitions be required, please consider this a request therefor and authorization to charge Deposit Account No. 04-1415 as necessary.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney.

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Respectfully submitted,



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